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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/754,937

01/09/2004

Ryuichi Takechi

FUJY 20.856

7408

26304 7590 04/30/2007  
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EXAMINER

RIVAS, SALVADOR E

ART UNIT

PAPER NUMBER

2609

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/754,937

Applicant(s)

TAKECHI ET AL.

Examiner

Salvador E. Rivas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/09/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement submitted on January 09, 2004 has been considered by the Examiner and made of record in the application file.

### ***Preliminary Amendment***

3. The present Office Action is based upon the original patent application filed on January 09, 2004 as modified by the preliminary amendment filed on January 09, 2004.

**Claims 1-9** are now pending in the present application.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "1" in Fig.1, and "7a" in Figs.4 and 5 have both been used to designate the *Ipv4-Ipv6 Translation Device*. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2, and 3** are rejected under 35 U.S.C. 102(b) as being anticipated by **Hamamoto et al. (U.S. Patent # 6,038,233)**.

Consider **claim 1**, Hamamoto et al. clearly shows and discloses an address translation device (inherently taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6) comprising: an extraction unit extracting, from data received via a first network, a fixed identifier indicating a transmission source of the data (Column 9 Lines 17-22); a storage unit storing the fixed identifier and an address, in a second network, of the transmission source indicated by the fixed identifier by relating fixed identifier and the address each other (Column 13 Lines 48-63); a reading unit reading the address, in the second network, stored on the storage unit and related to the fixed identifier extracted by the extraction unit (Column 6 Lines 22-27); and a replacing unit replacing the

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address in the second network read by the reading unit with the source address of the data (Column 6 Lines 30-34).

Consider **claim 2**, and **as applied to claim 1 above**, Hamamoto et al. clearly shows and discloses an address translation device (inherently taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6), further comprising: an identifier extraction unit extracting a variable address of a terminal device connected to the first network and the fixed identifier, from the data received via the first network (Column 4 Lines 43-50); an identifier storage unit storing the variable address and the fixed identifier extracted by the identifier extraction unit by relating the variable address and the fixed identifier (Column 4 Lines 54-55); a variable address acquisition unit acquiring, from the storage unit and the identifier storage unit, the variable address corresponding to a destination address of the data addressed to the terminal device, which contains, as a destination address, the address in the second network received via the second network; and a rewriting unit rewriting the destination address of the received data into the variable address acquired by the variable address acquisition unit (Column 2 Lines 49-67 – Column 3 Lines 1-13 and Column 9 Lines 13-36).

Consider **claim 3**, Hamamoto et al. clearly shows and discloses a packet translation device, interposed between an IPv6 (Internet Protocol version 6) network and an IPv4 (Internet Protocol version 4) network, for mutually translating an IPv4 packet and an IPv6 packet (inherently taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6), comprising: an extraction unit extracting, from the IPv6 packet, a fixed identifier indicating a transmission source of the IPv6 packet (Column 7 Lines 61-

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67); a storage unit storing the fixed identifier and an IPv4 address assigned to the transmission source by relating the fixed identifier and an IPv4 address each other (Column 8 Lines 30-39); a reading unit reading the IPv4 address stored on the storage unit and related to the fixed identifier extracted by the extraction unit (Column 8 Lines 2-13); and a packet translating unit translating the IPv6 packet into the IPv4 packet with the IPv4 address read by the reading unit being set as a source address (Abstract and Column 2 Lines 49-67 – Column 3 Lines 1-13).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 4-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hamamoto et al. (U.S. Patent # 6,038,233)** in view of **Asano et al. (U.S. Patent Application Publication # 2003/0185236 A1)**.

Consider **claim 4**, and **as applied to claim 3 above**, Hamamoto et al. clearly shows and discloses a packet translation device (taught by Ipv6/lpv4 translator 55 (Fig.1) and Column 6 Line 6).

However, Hamamoto et al. fails to teach wherein the identifier receiving unit receiving data containing a care-of address of an IPv6 terminal device and the fixed identifier indicating the IPv6 terminal device; an identifier storage unit storing the care-of address and the fixed identifier that have been received by the identifier receiving unit by relating to the care-of address and the fixed identifier each other; and a care-of address acquisition unit acquiring the care-of address corresponding to a destination address of the received IPv4 packet from the storage unit and from the identifier storage unit, wherein the packet translating unit translates the IPv4 packet into an IPv6 packet with the care-of address acquired by the care-of address acquisition unit being set as a destination address.

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In the same field of endeavor, Asano et al. illustrates a case where a the identifier receiving unit receiving data containing a care-of address of an IPv6 terminal device and the fixed identifier indicating the IPv6 terminal device ([0013] and [0015]); an identifier storage unit storing the care-of address and the fixed identifier that have been received by the identifier receiving unit by relating to the care-of address and the fixed identifier each other (taught by the address acquisition table [0013]); and a care-of address acquisition unit acquiring the care-of address corresponding to a destination address of the received IPv4 packet from the storage unit and from the identifier storage unit, wherein the packet translating unit translates the IPv4 packet into an IPv6 packet with the care-of address acquired by the care-of address acquisition unit being set as a destination address ([0013]-[0016]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have a Mobile Ipv6 terminal to send notice of a care of address via a home agent as shown by Asano et al. in the translator of Hamamoto et al. for the purpose of coupling two distinct networks having different addressing architectures.

Consider **claim 5**, and **as applied to claim 3 above**, Hamamoto et al. clearly discloses a packet translation device (taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6) except for wherein the fixed identifier is a home address of the IPv6 terminal device.



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In the same field of endeavor, Asano et al. illustrates a case where a Mobile Ipv6 terminal initializes a packet transmission, said Mobile Ipv6 terminal notifies a home agent of its unique home address ([0013]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made for a Mobile Ipv6 terminal to send notice to a home agent its unique home address once said terminal has initialized a transmission as shown by Asano et al. in the translator of Hamamoto et al. for the purpose of coupling two distinct networks having different addressing architectures.

Consider **claim 6**, and **as applied to claim 3 above**, Hamamoto et al., as modified by Asano et al., further discloses a packet translation device (inherently taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6), wherein the storage unit further stores a port number by relating the port number, the address and the fixed identifier each other (Column 13 Lines 48-63), and wherein the reading unit reads the IPv4 address and the source port number stored on the storage unit and related to the fixed identifier extracted by the extraction unit (Column 6 Lines 22-27).

Consider **claim 7**, and **as applied to claim 6 above**, Hamamoto et al. clearly shows and discloses a packet translation device (taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6), except for wherein the care-of address acquisition unit acquires, from the storage unit and the identifier storage unit, a care-of address corresponding to the destination address and the destination port number of the IPv4 packet received.

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In the same field of endeavor, Asano et al. illustrates a case where the care-of address acquisition unit (taught by home agent 20 (Fig.2)) acquires, from the storage unit and the identifier storage unit (taught by address management table [0016]), a care-of address corresponding to the destination address and the destination port number of the IPv4 packet received ([0015]-[0016]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have a Mobile Ipv6 terminal to send notice of a care of address via a home agent as shown by Asano et al. in the translator of Hamamoto et al. for the purpose of coupling two distinct networks having different addressing architectures.

Consider **claims 8 and 9**, Hamamoto et al. clearly shows and discloses a packet translation system comprising: a packet translation device, interposed between an IPv6 (Internet Protocol version 6) network and an IPv4 (Internet Protocol version 4) network, for mutually translating an IPv4 packet and an IPv6 packet (inherently taught by Ipv6/Ipv4 translator 55 (Fig.1) and Column 6 Line 6), comprising: an extraction unit extracting, from the IPv6 packet, a fixed identifier indicating a transmission source of the IPv6 packet (Column 9 Lines 17-22); a storage unit storing the fixed identifier and an IPv4 address assigned to the transmission source by relating the fixed identifier and an IPv4 address each other; a reading unit reading the IPv4 address stored on the storage unit and related to the fixed identifier extracted by the extraction unit (Column 13 Lines 48-63); a packet translating unit translating the IPv6 packet into the IPv4 packet with

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the IPv4 address read by the reading unit being set as a source address (Column 6 Lines 22-27).

However, Hamamoto et al. fails to teach wherein the identifier receiving unit receiving data containing a care-of address of an IPv6 terminal device and the fixed identifier indicating the IPv6 terminal device; an identifier storage unit storing the care-of address and the fixed identifier that have been received by the identifier receiving unit by relating to the care-of address and the fixed identifier each other; and a care-of address acquisition unit acquiring the care-of address corresponding to a destination address of the received IPv4 packet from the storage unit and from the identifier storage unit, wherein the packet translating unit translates the IPv4 packet into an IPv6 packet with the care-of address acquired by the care-of address acquisition unit being set as a destination address.

In the same field of endeavor, Asano et al. illustrates a case where a the identifier receiving unit receiving data containing a care-of address of an IPv6 terminal device and the fixed identifier indicating the IPv6 terminal device ([0013] and [0015]); an identifier storage unit storing the care-of address and the fixed identifier that have been received by the identifier receiving unit by relating to the care-of address and the fixed identifier each other (taught by the address acquisition table [0013]); and a care-of address acquisition unit acquiring the care-of address corresponding to a destination address of the received IPv4 packet from the storage unit and from the identifier storage unit, wherein the packet translating unit translates the IPv4 packet into an IPv6 packet

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with the care-of address acquired by the care-of address acquisition unit being set as a destination address ([0013]-[0016]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have a Mobile Ipv6 terminal to send notice of a care of address via a home agent as shown by Asano et al. in the translator of Hamamoto et al. for the purpose of coupling two distinct networks having different addressing architectures.

***Conclusion***

8. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or early communications from the Examiner should be directed to Salvador E. Rivas whose telephone number is (571) 270-1784. The examiner can normally be reached on Monday-Friday from 7:30AM to 5:00PM.

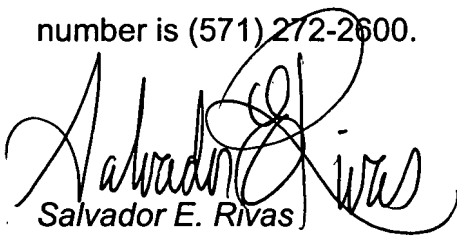
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272- 7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

  
Salvador E. Rivas  
S.E.R./ser

April 24, 2007

